

**GBU1008UL**  
**Low VF Bridge Rectifier**
**FEATURES**

- \* Internal structure with GPRC (glass passivated rectifier chip) inside
- \* Lead free product, compliance to RoHS
- \* Low forward voltage drop
- \* Superior thermal conductivity
- \* Ideal for printed circuit boards
- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0

**MECHANICAL DATA**
**Case :** Molded Plastic

**Terminals :** Tin Plated, solderable per MIL-STD-750, Method 2026.

**Polarity :** As marked on Body

**Mounting Torque :** 7 cm·kg max.

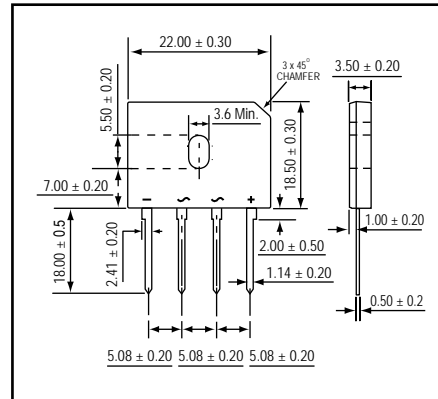
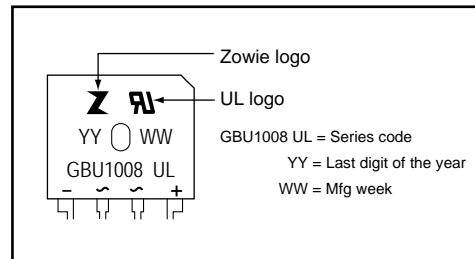
**Recommended Torque :** 5.7 cm·kg

**PACKING**
**Bulk :**

- \* 20 pcs per tube pack
- \* 720 pcs per boxes
- \* 2,880 pcs per carton

**OUTLINE DIMENSIONS**
**Case : GBU-L**

Unit : mm

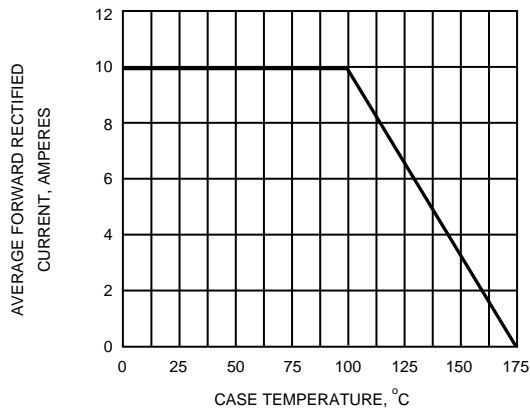
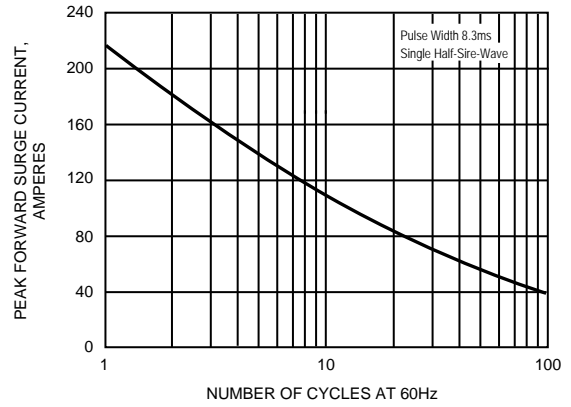
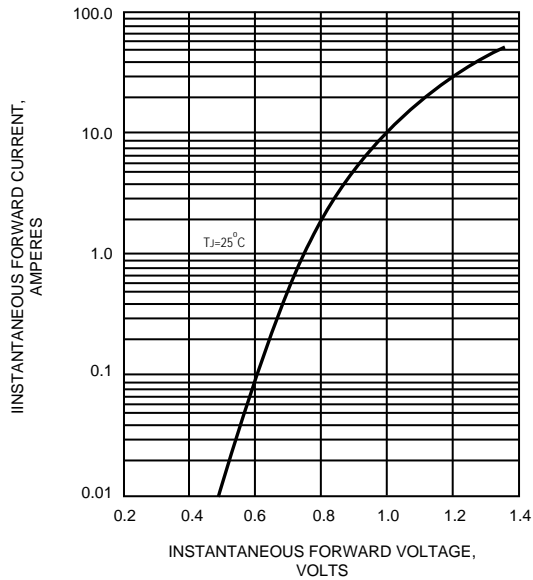
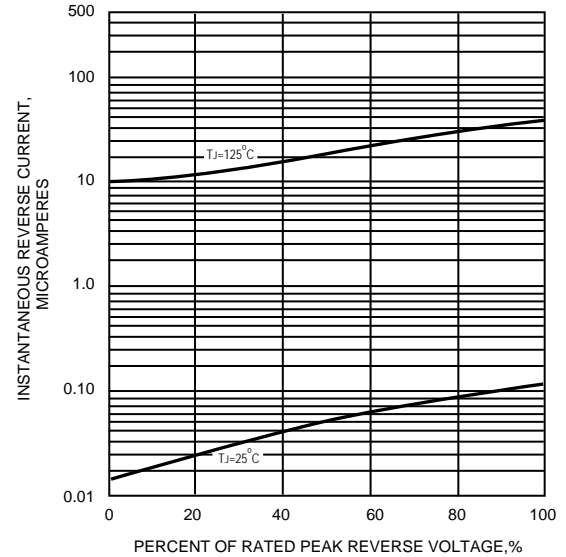

**MARKING**

**Absolute Maximum Ratings (Ta = 25 °C)**

ITEM	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	VRRM		800	V
Average forward current at Tc = 100	IF(AV)	With heatsink	10	A
Peak forward surge current	IFSM	8.3ms single half sine-wave	220	A
Operating junction and storage temperature Range	Tj, TSTG		-55 to +175	°C

**Electrical characteristics (Ta = 25 °C)**

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	VF	IF = 5A	-	0.90	0.92	V
Repetitive peak reverse current	IRRM	VR = Max. VRRM, Ta = 25 °C	-	-	2	uA
Rating for fusing ( t<8.3ms)	I <sup>2</sup> t		-	-	200	A <sup>2</sup> sec
Junction capacitance	Cj	VR = 4V, f = 1.0 MHz (NOTE 1)	-	69	-	pF
Thermal resistance	Rth(JA)	Junction to ambient (Without heatsink)	-	25	-	°C/W
	Rth(JC)	Junction to lead (With heatsink)	-	3.2	-	

NOTES : (1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
 (2) Preliminary

**FIG.1 - FORWARD CURRENT DERATING CURVE**

**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**

**FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

**FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT**

**FIG.5 - TYPICAL JUNCTION CAPACITANCE**
